

Thermal Paste for Side Discharge Inverter Boards

Important: Before torquing down the screws during board installation, thermal paste must be applied to ensure proper heat transfer and prevent overheating. There are seven components on the small chassis board that require thermal grease. (Part# 9S000859)

Steps for Applying Thermal Paste:

1. Refer to the pictures below to locate the seven components (small chassis) and the two locations (large chassis) that require thermal paste.
 - Remove old paste, ensuring the surface is clean and clear of any debris.
 - Apply a small, even amount of thermal paste directly onto the surface of each of the seven components.
 - Use a thin layer — just enough to ensure full surface contact with the heat sink.
 - Do not overapply; excess paste can lead to poor thermal performance or component contamination.
2. Check Coverage:
 - After applying, visually confirm that each of the seven designated areas has an even coat.
 - Avoid applying thermal paste to any areas not marked in the diagram.
3. Proceed with Installation:
 - Once thermal paste is applied, carefully align the board.
 - Torque the screws down to the specified values in the correct sequence.

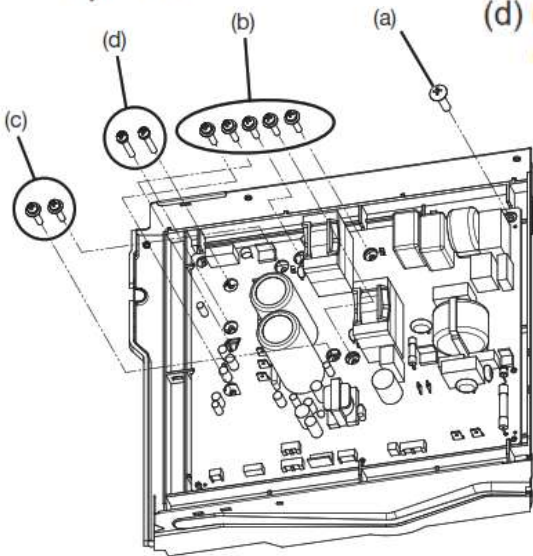
Small Chassis

■ The main control board screws are:

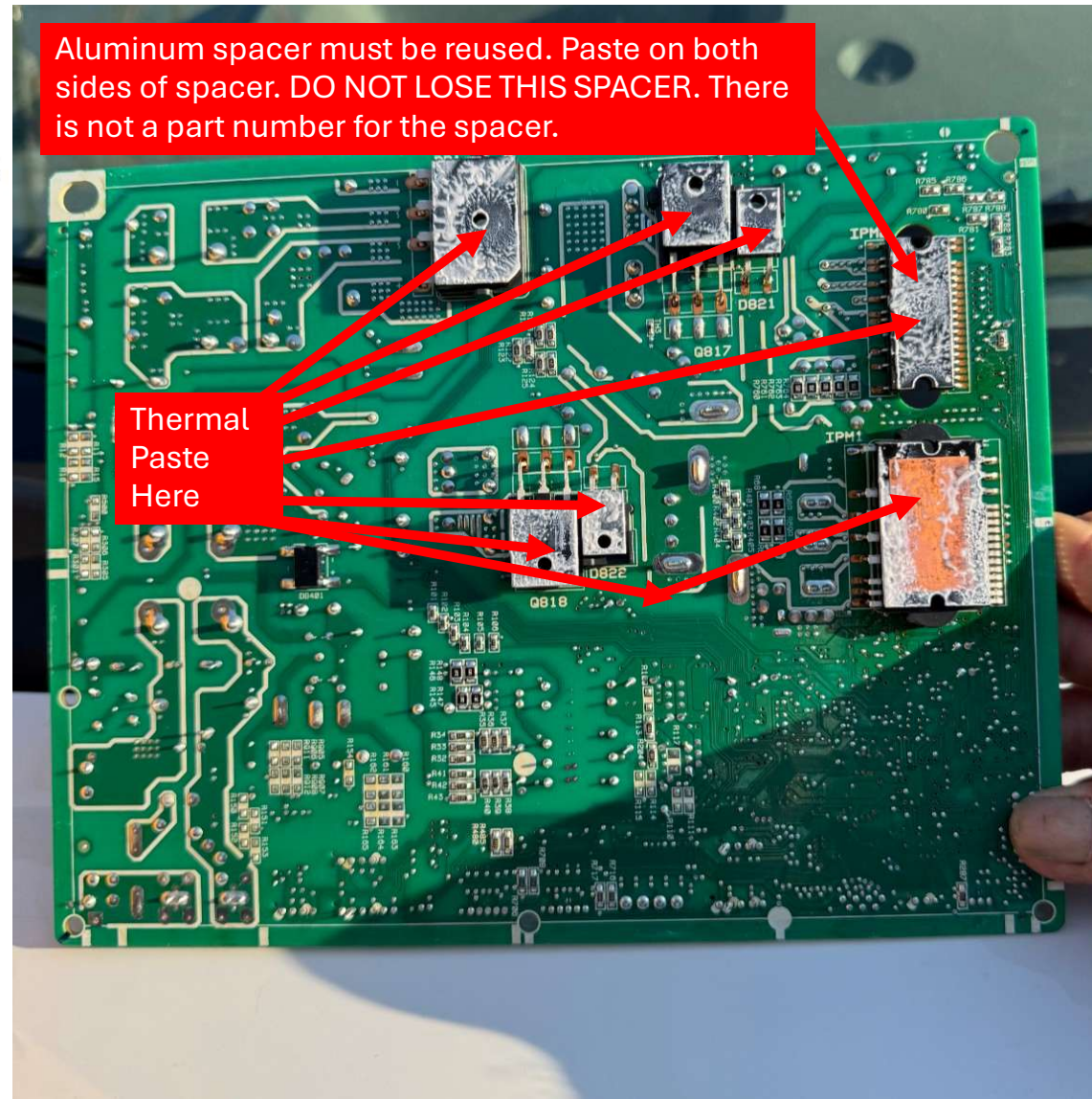
- (a) Truss head tapping screw
1 pc: M4 × 16
- (b) Pan head machine screw
5 pc: M3 × 16 or M3 × 20
- (c) Pan head machine screw
2 pc: M3 × 16 or M3 × 20
- (d) Pan head machine screw
2 pc: M3 × 20

■ When reassembling, fix the screw with the following torque.

- Tightening torque:
- (a) 0.86-1.01 lb·ft
(1.17-1.37 N·m)
 - (b) 0.43-0.57 lb·ft
(0.58-0.77 N·m)
 - (c) 0.36-0.50 lb·ft
(0.49-0.68 N·m)
 - (d) 0.22-0.37 lb·ft
(0.30-0.50 N·m)



Aluminum spacer must be reused. Paste on both sides of spacer. DO NOT LOSE THIS SPACER. There is not a part number for the spacer.



If necessary, alcohol can be used to remove the paste from the components as it evaporates and will not leave a residue on the component. Care should be used when applying the alcohol, use a cotton ball or Q tip, to not get it on any other part of the board.

Large Chassis

- The refrigerant cooling pipe screws are different from the remaining screws. Do not mix the screws. (M4 × 10)
- Tightening torque: 1.59 ± 0.2 N·m (1.17 ± 0.15 lb·ft)
Tighten with a driver until the position where a tightening torque increases suddenly. Then extra-tighten by 30° to 40° .
- Remove the grease and apply new grease as indicated.

Grease material:
Shin Etsu G-776

- Coating range (▨)
- Coat within limits of ± 3 mm (0.12 in) from the center of the gutter.
- The width of the grease is 2 mm (0.08 in) or more.
- Applied amount of grease on each side: 2.1 (+0.5, 0) g (0.074(+0.018, 0) oz)

Jacket cover

